

## **CLAIM LISTING**

1. **(Currently Amended)** A method of operating a base station comprising:  
receiving a random access request for a traffic channel of a plurality of traffic channels  
on a first random traffic channel of the plurality of traffic channels, the first random traffic  
channel not designated as a random access channel, the traffic channels to be selectively  
allocatable by the base station for communication with a user terminal;  
determining whether a traffic channel of the plurality of traffic channels is available to  
allocate to the requestor based on an evaluation of factors, including evaluating a status of a  
subscriber from whom the request originates including subscription terms of the subscriber; and  
communicating to the requestor whether a traffic channel of the plurality of traffic  
channels is available.
2. (Original) The method of claim 1 wherein:  
communicating includes denying the request for a channel.
3. (Original) The method of claim 1 wherein:  
communicating includes granting the request for a channel by assigning the first channel.
4. (Original) The method of claim 1 wherein:  
communicating includes granting the request for a channel by assigning a second channel  
and the first channel.
5. (Original) The method of claim 1 wherein:  
communicating includes granting the request for a channel by assigning a second channel  
instead of the first channel.
6. (Original) The method of claim 1 wherein:  
determining includes evaluating a load of the system.
7. (Original) The method of claim 1 wherein:  
determining includes evaluating an emergency status of the request.
8. **(Canceled)**
9. **(Currently Amended)** The method of ~~claim 8~~ claim 1 wherein:  
~~evaluating the status includes~~ evaluating the subscription terms of the subscriber includes  
evaluating a guaranteed probability of access in connecting specified in the subscription terms.
10. **(Currently Amended)** The method of ~~claim 8~~ claim 1 wherein:  
evaluating the status includes evaluating the payment history of the subscriber.

11. (Original) The method of claim 1 wherein:  
determining includes evaluating a nature of the request.
12. (Original) The method of claim 11 wherein:  
the nature of the request includes a high bandwidth requirement.
13. (Original) The method of claim 11 wherein:  
the nature of the request includes a low bandwidth requirement.
14. (Original) The method of claim 11 wherein:  
the nature of the request includes a set of capabilities of equipment used to make the request.
15. (Original) The method of claim 3 further comprising:  
receiving a request for a third channel of the plurality of channels upon assigning of the first channel;  
determining whether a third or fourth channel of the plurality of channels is available;  
and  
communicating to the requestor the third channel availability or fourth channel availability.
16. **(Currently Amended)** A method of operating a user terminal comprising:  
sending a request for a first unallocated traffic channel of a plurality of traffic channels on the first unallocated traffic channel to access a network, the request including a subscriber identification; and  
receiving an indication of availability of a traffic channel of the plurality of traffic channels, the indication of availability based on an evaluation of factors, including evaluating a status of the subscriber of the user terminal including subscription terms of the subscriber.
17. **(Canceled)**
18. (Original) The method of claim 16 wherein:  
the request including an emergency code.
19. (Original) The method of claim 16 wherein:  
the request including an equipment identification.
20. (Original) The method of claim 16 wherein:  
the request including a training sequence.
21. (Original) The method of claim 16 wherein:

- the indication signaling no channel is available.
22. (Original) The method of claim 16 wherein:  
the indication signaling the first channel is available.
23. (Original) The method of claim 16 wherein:  
the indication signaling a second channel of the plurality of channels is available.
24. (Original) The method of claim 23 wherein:  
the indication signaling the first channel is also available.
25. (Original) The method of claim 22 further comprising:  
communicating using the first channel.
26. (Original) The method of claim 23 further comprising:  
communicating using the second channel.
27. (Original) The method of claim 24 further comprising:  
communicating using the first channel and the second channel.
28. (Original) The method of claim 25 further comprising:  
sending a request for a third channel of the plurality of channels; and  
Receiving an indication of availability of a channel of the plurality of channels.
29. (Original) The method of claim 28 wherein:  
the indication signaling the third channel is not available.
30. (Original) The method of claim 28 wherein:  
the indication signaling the third channel is available.
31. (Original) The method of claim 28 wherein:  
the indication signaling a fourth channel is available.
32. (Original) The method of claim 21 further comprising:  
waiting an inter-channel delay;  
sending a request for a third channel of the plurality of channels on the third channel;  
receiving an indication of availability of a channel of the plurality of channels.
33. (Original) The method of claim 32 wherein:  
the indication signaling the third channel is not available;  
determining no other channels may be requested;  
waiting an inter-attempt delay; and  
sending a request for the first channel on the first channel.

**34-38. (Canceled)**

- 39. (Currently Amended)** The method of ~~claim 8~~ claim 1 wherein:  
evaluating the status includes evaluating the usage history of the subscriber.
- 40. (Original)** The method of claim 1 wherein:  
determining includes evaluating the radio frequency characteristics of the request.

**41-63. (Canceled)**

**64. (Currently Amended)** A machine-readable medium embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, the method comprising:

receiving a random access request for a traffic channel of a plurality of traffic channels on a first random traffic channel of the plurality of traffic channels, the first random traffic channel not designated as a random access channel, the traffic channels to be selectively allocatable by the base station for communication with a user terminal;

determining whether a traffic channel of the plurality of traffic channels is available to allocate to the requestor based on an evaluation of factors, including evaluating a status of a subscriber from whom the request originates including subscription terms of the subscriber; and

communicating to the requestor whether a traffic channel of the plurality of traffic channels is available.

- 65. (Original)** The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:  
communicating includes denying the request for a channel.
- 66. (Original)** The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:  
communicating includes granting the request for a channel by assigning the first channel.
- 67. (Original)** The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:  
communicating includes granting the request for a channel by assigning a second channel and the first channel.

68. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:  
communicating includes granting the request for a channel by assigning a second channel instead of the first channel.
69. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:  
determining includes evaluating a load of the system.
70. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:  
determining includes evaluating an emergency status of the request.
71. (Canceled)
72. (Currently Amended) The machine-readable medium of ~~claim 71~~ claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:  
~~evaluating the status includes~~ evaluating the subscription terms of the subscriber includes evaluating a guaranteed probability of access in connecting specified in the subscription terms.
73. (Currently Amended) The machine-readable medium of ~~claim 71~~ claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:  
evaluating the status includes evaluating the payment history of the subscriber.
74. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:  
determining includes evaluating a nature of the request.
75. (Original) The machine-readable medium of claim 74 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:  
the nature of the request includes a high bandwidth requirement.
76. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:  
the nature of the request includes a low bandwidth requirement.

77. (Original) The machine-readable medium of claim 74 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:  
the nature of the request includes a set of capabilities of equipment used to make the request.

78. (Original) The machine-readable medium of claim 66 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:  
receiving a request for a third channel of the plurality of channels upon assigning of the first channel;

determining whether a third or fourth channel of the plurality of channels is available;  
and

communicating to the requestor the third channel availability or fourth channel availability.

79. (Currently Amended) The machine-readable medium of ~~claim 74~~ claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

evaluating the status includes evaluating the usage history of the subscriber.

80. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:  
determining includes evaluating the radio frequency characteristics of the request.

81. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:  
communicating includes at least one of: denying the request for a channel, granting the request for a channel by assigning the first channel, granting the request for a channel by assigning a second channel and the first channel, or granting the request for a channel by assigning a second channel instead of the first channel.

82. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:  
determining includes at least one of: evaluating the radio frequency characteristics of the request, evaluating a load of the system, evaluating an emergency status of the request, evaluating a status of a subscriber from whom the request originates, or evaluating a nature of the request.

**83-85.** (Canceled)

**86.** (Previously Presented) The method of claim 1, further comprising calculating a set of spatial multiplexing weights and a set of spatial demultiplexing weights associated with the request.

**87.** (Previously Presented) The method of claim 1, wherein communicating to the requestor includes using the set of spatial multiplexing weights to tailor a multi-lobe antenna radiation pattern.

**88-91.** (Canceled)

**92.** (**New**) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, further comprising:

calculating a set of spatial multiplexing weights and a set of spatial demultiplexing weights associated with the request.

**93.** (**New**) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

communicating to the requestor includes using the set of spatial multiplexing weights to tailor a multi-lobe antenna radiation pattern.